

ABSTRACT

A method for generating a three-dimensional data model of a surface comprising the steps of selecting data parameters for the three-dimensional data model; configuring a data acquisition system corresponding to the data parameters, wherein the data acquisition system comprises a data acquisition apparatus and a data acquisition computer system; scanning the surface with the data acquisition system to obtain digital images of the surface and position data for determining three-dimensional coordinates of the surface; determining the three-dimensional coordinates of the surface from the position data and the digital images; associating the digital images with the three-dimensional coordinates to produce the three-dimensional data model; and, storing the three-dimensional data model in the data acquisition system.